



Sun Heat

Low Intensity Infra-Red Heaters



Sizes to fit Your Needs.....

“Sun-Heat” radiant system directs the heat down where it belongs... fuel savings of 30% to 50%

Compare conventional warm air to infra-red radiant heat.

Warm Air

Warm Air System:

- 20% to 25% stack loss
- High temperature or static pressure at the roof line increases heat transfer through roof.
- The higher the bay area, the higher the static pressure.
- Because of air movement in the building space, thermostat must be set higher to achieve comfort level.
- Cold floors in most cases are 10° less than thermostat setting.
- 120° and higher. Discharged air rises to roof line.
- 90°
- 70°
- 60°
- Negative pressure at the perimeter of building allows for infiltration.
- Listed by CSA for vented or unvented application.

Radiant Heat System:

- Low stack temperature 300°
- No air movement, but same comfort level, with lower thermostat setting.
- 70°
- 65°
- 75°
- Reradiation from concrete mass results in even temperature throughout the building.
- No stacking effect; greatly reduces static pressure at the roof line, reducing costly infiltration.
- With the comfort of warm floors, building is heated from floor up instead of from roof down.

What is infra-red and how does it work?

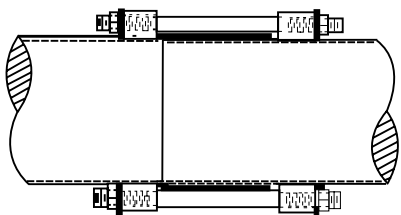
Radiant Heat

- Infra-red rays travel in divergent straight lines from heat source to all surfaces and objects without heating the air they pass through.
- In addition to those rays which travel directly from the heat source, other rays are re-directed downward by a mirror surfaced reflector.
- A portion of the ray's energy is absorbed by cooler receiving surfaces. Conduction carries some of the heat deeper into the heated material creating a heat reservoir.
- The balance of the radiant heat is reflected from the heating surface to be absorbed by surrounding cool surfaces.
- As a secondary effect, the room temperature is raised by convective transfer from the heated surface.
- A part of the secondary ray energy, now of longer wave length, is absorbed by moisture and particles in the air, which helps to raise the temperature.

Sun-Heat Standard System Features

GAS BURNER

- Burner and controls U.L. listed for United States and Canada
- Hot Surface ignition and electronic safety–No Pilot
- 60,000, 80,000, 100,000, 125,000, 150,000, 175,000, 200,000 Btu/hr input sizes (natural or propane gas)
- Combustion Air inlet collar
- Sight glass for monitoring burner operation
- Combustion air proving differential switch
- Electrical & gas controls separated from combustion air stream
- Burner Housing 18 GA. galvanized steel
- Electrical–120 volt/60/1 ph
- U.L. listed for Vented or Unvented applications
- (1) year limited warranty

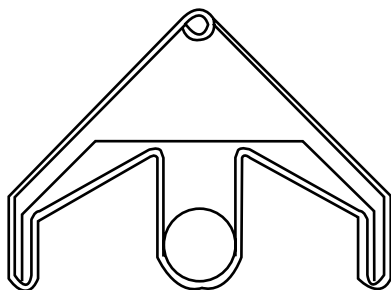


FLARED PIPE FORMS

Male-Female Type Connection
Compression Fitting
No Clamps or Draw Bands

TUBE SYSTEM

- Combustion chamber–10' x 4" OD, 16 gauge aluminized steel with flared burner mounting flange
- Heat exchanger– as required, remaining system comes in 10' or 5' 16 gauge aluminized steel
- Flared fitting pipe connector with draw bolts at each joint for solid compression type fitting–no gaskets or draw bands
- 20' to 70' systems–Straight systems or optional "L" or "U" shaped systems using 90 deg elbows. (see schedule for tube lengths available)
- 10 year limited warranty



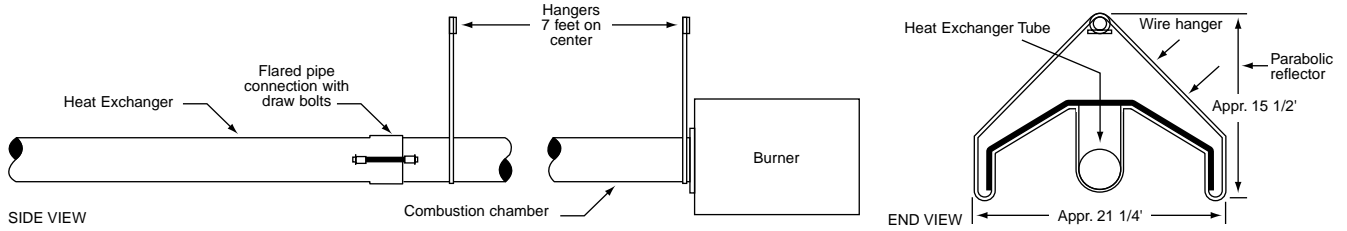
REFLECTORS

- High polished parabolic reflectors standard
- 8' or 4' lengths
- Reflector shield and tube system supported by heavy gauge wire hangers placed approx. 7' apart

OPTIONAL FEATURES

- Outside combustion air inlet hood with flexible 4" diameter duct
- 90 deg elbows for "L" or "U" shaped configurations
- Diffuser "V" reflector for low mounting applications
- Vent cap adapter (4" dia steel to 4" dia class "B" vent pipe)
- Line voltage thermostat
- 24 volt relay to convert line voltage thermostat to 24 volt thermostat
- Burner "ON" running light

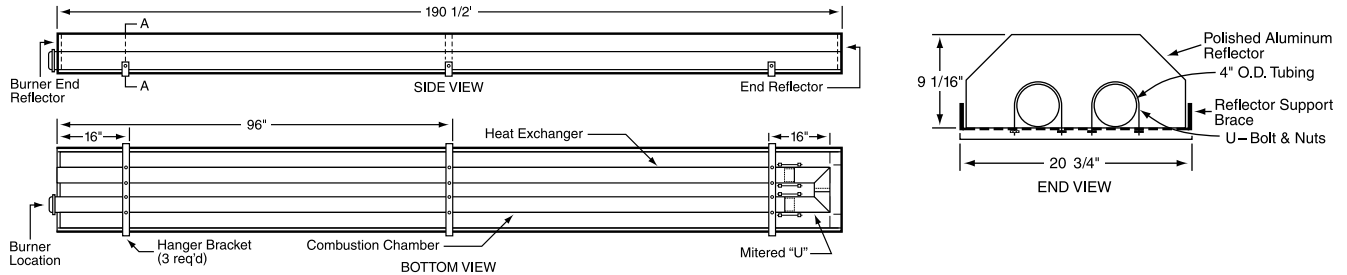
Dornback DSH Series Radiant Tube Specifications



Model No. and Tube Length	BTU/HR Input (Nat.-LP)	Average Mounting Height	Radiant Surface (Sq. Ft.)	Clearance to Combustibles			Manifold Pressure		Shipping Weight (Lbs.)
				Side*	Above Reflector	Below Reflector	Nat.	LP	
DSH-60-20'	60,000	10' - 15'	20	20"	2"	50"	3.5" W.C.	10" W.C.	170
DSH-60-30'	60,000	10' - 15'	30	20"	2"	50"	3.5" W.C.	10" W.C.	200
DSH-80-30'	80,000	10' - 15'	30	20"	2"	50"	3.5" W.C.	10" W.C.	200
DSH-80-40'	80,000	12' - 18'	40	20"	2"	50"	3.5" W.C.	10" W.C.	230
DSH-100-30'	100,000	12' - 18'	30	20"	2"	50"	3.5" W.C.	10" W.C.	200
DSH-100-40'	100,000	14' - 22'	40	20"	2"	50"	3.5" W.C.	10" W.C.	230
DSH-100-50'	100,000	14' - 22'	50	20"	2"	50"	3.5" W.C.	10" W.C.	260
DSH-125-40'	125,000	15' - 25'	40	20"	2"	70"	3.5" W.C.	10" W.C.	230
DSH-125-50'	125,000	15' - 25'	50	20"	2"	70"	3.5" W.C.	10" W.C.	260
DSH-150-50'	150,000	18' - 30'	50	20"	2"	70"	3.5" W.C.	10" W.C.	260
DSH-150-60'	150,000	18' - 30'	60	20"	2"	70"	3.5" W.C.	10" W.C.	290
DSH-175-50'	175,000	18' - 30'	50	20"	2"	70"	3.5" W.C.	10" W.C.	260
DSH-175-60'	175,000	18' - 30'	60	20"	2"	70"	3.5" W.C.	10" W.C.	290
DSH-175-70'	175,000	18' - 30'	70	20"	2"	70"	3.5" W.C.	10" W.C.	330
DSH-200-50'	200,000	18' - 30'	50	20"	2"	70"	3.5" W.C.	10" W.C.	260
DSH-200-60'	200,000	18' - 30'	60	20"	2"	70"	3.5" W.C.	10" W.C.	290
DSH-200-70'	200,000	18' - 30'	70	20"	2"	70"	3.5" W.C.	10" W.C.	330

Pre-Assembled U TUBE Radiant Tube Heating Systems... 8 or 16 Feet Long

UDSH-30-8'	30,000	8' - 10'	16	26"	12"	90"	3.5" W.C.	10" W.C.	160
UDSH-45-8'	45,000	9' - 12'	16	26"	12"	90"	3.5" W.C.	10" W.C.	160
UDSH-60-8'	60,000	10' - 15'	16	26"	12"	90"	3.5" W.C.	10" W.C.	160
UDSH-60-16'	60,000	10' - 15'	32	26"	12"	90"	3.5" W.C.	10" W.C.	200
UDSH-80-16'	80,000	10' - 18'	32	26"	12"	90"	3.5" W.C.	10" W.C.	200
UDSH-100-16'	100,000	12' - 22'	32	26"	12"	90"	3.5" W.C.	10" W.C.	200



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